

In the Claims

1 1. (Previously presented) A computer-implemented system for associating target
2 data with a product classification schema, the system comprising a data association module
3 operable to:

4 access a first product classification schema, the first schema comprising a taxonomy
5 comprising a hierarchy of classes into which products may be categorized, the first schema
6 further comprising ontologies associated with one or more of the classes, each ontology
7 comprising one or more product attributes;

8 access target data to be associated with the first schema, the target data organized
9 according to a second product classification schema;

10 {determine one or more classes of the first schema with which at least a portion of the
11 target data should be associated based on an automatic comparison, without translating the
12 target data from the second schema to the first schema, between the target data and the
13 product attributes of the ontologies of the first schema or between the target data and values
14 for one or more of the product attributes of the ontologies of the first schema; and /

15 associate the at least a portion of the target data with one or more classes of the first
16 schema in response to determining, based on the automatic comparison, the one or more
17 classes of the first schema with which the at least a portion of the target data should be
18 associated.

1 2. (Previously presented) The system of Claim 1, wherein determining one or
2 more classes of the first schema with which the at least a portion of the target data should be
3 associated comprises identifying a portion of the target data including the name or an
4 equivalent name of a product attribute included in the ontologies of these one or more classes
5 of the first schema.

1 3. (Previously presented) The system of Claim 1, wherein determining one or
2 more classes of the first schema with which the at least a portion of the target data should be
3 associated comprises identifying a portion of the target data including values that match or
4 are similar to values for a product attribute included in the ontologies of these one or more
5 classes of the first schema.

1 4. (Previously presented) The system of Claim 1, wherein determining one or
2 more classes of the first schema with which the at least a portion of the target data should be
3 associated comprises identifying a portion of the target data including a range of values that
4 matches or is similar to a range of values for a product attribute included in the ontologies of
5 these one or more classes of the first schema.

1 5. (Previously presented) The system of Claim 1, wherein determining one or
2 more classes of the first schema with which the at least a portion of the target data should be
3 associated comprises identifying a portion of the target data including symbols that match or
4 are similar to symbols associated with values for a product attribute included in the
5 ontologies of these one or more classes of the first schema.

1 6. (Previously presented) The system of Claim 1, wherein determining one or
2 more classes of the first schema with which the at least a portion of the target data should be
3 associated comprises identifying a portion of the target data having formatting that matches
4 or is similar to formatting of values for a product attribute included in the ontologies of these
5 one or more classes of the first schema.

1 7. (Previously presented) The system of Claim 1, wherein determining one or
2 more classes of the first schema with which the at least a portion of the target data should be
3 associated comprises using vector space analysis to identify multiple portions of the target
4 data including values that correspond to values for multiple product attributes included in the
5 ontologies of these one or more classes of the first schema.

1 8. (Previously presented) The system of Claim 1, wherein determining one or
2 more classes of the first schema with which the at least a portion of the target data should be
3 associated comprises using statistical correlation techniques to identify portions of the target
4 data including values that correspond to values for a product attribute included in the
5 ontologies of these one or more classes of the first schema.

1 9. (Previously presented) The system of Claim 1, wherein the values for one or
2 more of the product attributes of the ontologies of the first schema with which the target data
3 may be compared are stored in one or more seller databases, the values in the seller databases
4 being identified by one or more pointers associated with one or more classes of the first
5 schema.

1 10. (Previously presented) The system of Claim 1, wherein associating the at least
2 a portion of the target data with one or more classes of the first schema comprises associating
3 one or more pointers to the target data with the one or more classes of the first schema.

1 11. (Previously presented) The system of Claim 1, wherein associating the at least
2 a portion of the target data with one or more classes of the first schema comprises associating
3 one or more pointers to specific portions of the target data with one or more product attributes
4 included in the ontology of the one or more classes of the first schema.

1 12. (Currently amended) A computer-implemented method for associating target
2 data with a product classification schema, the method performed using a computer system
3 comprising one or more processing units and one or more memory units, the method
4 comprising:

5 using the computer system, accessing a first product classification schema, the first
6 schema comprising a taxonomy comprising a hierarchy of classes into which products may
7 be categorized, the first schema further comprising ontologies associated with one or more of
8 the classes, each ontology comprising one or more product attributes;

9 using the computer system, accessing target data to be associated with the first
10 schema, the target data organized according to a second product classification schema;

11 using the computer system, determining one or more classes of the first schema with
12 which at least a portion of the target data should be associated based on an automatic
13 comparison, without translating the target data from the second schema to the first schema,
14 between the target data and the product attributes of the ontologies of the first schema or
15 between the target data and values for one or more of the product attributes of the ontologies
16 of the first schema; and

17 using the computer system, associating the at least a portion of the target data with
18 one or more classes of the first schema in response to determining, based on the automatic
19 comparison, the one or more classes of the first schema with which the at least a portion of
20 the target data should be associated.

1 13. (Previously presented) The method of Claim 12, wherein determining one or
2 more classes of the first schema with which the at least a portion of the target data should be
3 associated comprises identifying a portion of the target data including the name or an
4 equivalent name of a product attribute included in the ontologies of these one or more classes
5 of the first schema.

1 14. (Previously presented) The method of Claim 12, wherein determining one or
2 more classes of the first schema with which the at least a portion of the target data should be
3 associated comprises identifying a portion of the target data including values that match or
4 are similar to values for a product attribute included in the ontologies of these one or more
5 classes of the first schema.

1 15. (Previously presented) The method of Claim 12, wherein determining one or
2 more classes of the first schema with which the at least a portion of the target data should be
3 associated comprises identifying a portion of the target data including a range of values that
4 matches or is similar to a range of values for a product attribute included in the ontologies of
5 these one or more classes of the first schema.

1 16. (Previously presented) The method of Claim 12, wherein determining one or
2 more classes of the first schema with which the at least a portion of the target data should be
3 associated comprises identifying a portion of the target data including symbols that match or
4 are similar to symbols associated with values for a product attribute included in the
5 ontologies of these one or more classes of the first schema.

1 17 (Previously presented) The method of Claim 12, wherein determining one or
2 more classes of the first schema with which the at least a portion of the target data should be
3 associated comprises identifying a portion of the target data having formatting that matches
4 or is similar to formatting of values for a product attribute included in the ontologies of these
5 one or more classes of the first schema.

1 18. (Previously presented) The method of Claim 12, wherein determining one or
2 more classes of the first schema with which the at least a portion of the target data should be
3 associated comprises using vector space analysis to identify multiple portions of the target
4 data including values that correspond to values for multiple product attributes included in the
5 ontologies of these one or more classes of the first schema.

1 19. (Previously presented) The method of Claim 12, wherein determining one or
2 more classes of the first schema with which the at least a portion of the target data should be
3 associated comprises using statistical correlation techniques to identify portions of the target
4 data including values that correspond to values for a product attribute included in the
5 ontologies of these one or more classes of the first schema.

1 20. (Previously presented) The method of Claim 12, wherein the values for one or
2 more of the product attributes of the ontologies of the first schema with which the target data
3 may be compared are stored in one or more seller databases, the values in the seller databases
4 being identified by one or more pointers associated with one or more classes of the first
5 schema.

1 21. (Previously presented) The method of Claim 12, wherein associating the at
2 least a portion of the target data with one or more classes of the first schema comprises
3 associating one or more pointers to the target data with the one or more classes of the first
4 schema

1 22. (Previously presented) The method of Claim 12, wherein associating the at
2 least a portion of the target data with one or more classes of the first schema comprises
3 associating one or more pointers to specific portions of the target data with one or more
4 product attributes included in the ontology of the one or more classes of the first schema.

1 23. (Previously presented) Software for associating target data with a product
2 classification schema, the software being embodied in a computer-readable medium and
3 when executed operable to:

4 access a first product classification schema, the first schema comprising a taxonomy
5 comprising a hierarchy of classes into which products may be categorized, the first schema
6 further comprising ontologies associated with one or more of the classes, each ontology
7 comprising one or more product attributes;

8 access target data to be associated with the first schema, the target data organized
9 according to a second product classification schema;

10 determine one or more classes of the first schema with which at least a portion of the
11 target data should be associated based on a an automatic comparison, without translating the
12 target data from the second schema to the first schema, between the target data and the
13 product attributes of the ontologies of the first schema or between the target data and values
14 for one or more of the product attributes of the ontologies of the first schema; and

15 associate the at least a portion of the target data with one or more classes of the first
16 schema in response to determining, based on the automatic comparison, the one or more
17 classes of the first schema with which the at least a portion of the target data should be
18 associated.

1 24. (Previously presented) The software of Claim 23, wherein determining one or
2 more classes of the first schema with which the at least a portion of the target data should be
3 associated comprises identifying a portion of the target data including the name or an
4 equivalent name of a product attribute included in the ontologies of these one or more classes
5 of the first schema.

1 25. (Previously presented) The software of Claim 23, wherein determining one or
2 more classes of the first schema with which the at least a portion of the target data should be
3 associated comprises identifying a portion of the target data including values that match or
4 are similar to values for a product attribute included in the ontologies of these one or more
5 classes of the first schema.

1 26. (Previously presented) The software of Claim 23, wherein determining one or
2 more classes of the first schema with which the at least a portion of the target data should be
3 associated comprises identifying a portion of the target data including a range of values that
4 matches or is similar to a range of values for a product attribute included in the ontologies of
5 these one or more classes of the first schema.

1 27. (Previously presented) The software of Claim 23, wherein determining one or
2 more classes of the first schema with which the at least a portion of the target data should be
3 associated comprises identifying a portion of the target data including symbols that match or
4 are similar to symbols associated with values for a product attribute included in the
5 ontologies of these one or more classes of the first schema.

1 28. (Previously presented) The software of Claim 23, wherein determining one or
2 more classes of the first schema with which the at least a portion of the target data should be
3 associated comprises identifying a portion of the target data having formatting that matches
4 or is similar to formatting of values for a product attribute included in the ontologies of these
5 one or more classes of the first schema.

1 29. (Previously presented) The software of Claim 23, wherein determining one or
2 more classes of the first schema with which the at least a portion of the target data should be
3 associated comprises using vector space analysis to identify multiple portions of the target
4 data including values that correspond to values for multiple product attributes included in the
5 ontologies of these one or more classes of the first schema.

1 30. (Previously presented) The software of Claim 23, wherein determining one or
2 more classes of the first schema with which the at least a portion of the target data should be
3 associated comprises using statistical correlation techniques to identify portions of the target
4 data including values that correspond to values for a product attribute included in the
5 ontologies of these one or more classes of the first schema.

1 31. (Previously presented) The software of Claim 23, wherein the values for one
2 or more of the product attributes of the ontologies of the first schema with which the target
3 data may be compared are stored in one or more seller databases, the values in the seller
4 databases being identified by one or more pointers associated with one or more classes of the
5 first schema.

1 32. (Previously presented) The software of Claim 23, wherein associating the at
2 least a portion of the target data with one or more classes of the first schema comprises
3 associating one or more pointers to the target data with the one or more classes of the first
4 schema

1 33. (Previously presented) The software of Claim 23, wherein associating the at
2 least a portion of the target data with one or more classes of the first schema comprises
3 associating one or more pointers to specific portions of the target data with one or more
4 product attributes included in the ontology of the one or more classes of the first schema.

1 34. (Previously presented) A system for associating target data with a product
2 classification schema, the system comprising:

3 means for accessing a first product classification schema, the first schema comprising
4 a taxonomy comprising a hierarchy of classes into which products may be categorized, the
5 schema further comprising ontologies associated with one or more of the classes, each
6 ontology comprising one or more product attributes;

7 means for accessing target data to be associated with the first schema, the target data
8 organized according to a second product classification schema;

9 means for determining one or more classes of the first schema with which at least a
10 portion of the target data should be associated based on a an automatic comparison, without
11 translating the target data from the second schema to the first schema, between the target data
12 and the product attributes of the ontologies of the first schema or between the target data and
13 values for one or more of the product attributes of the ontologies of the first schema; and

14 means for associating the at least a portion of the target data with one or more classes
15 of the first schema in response to determining, based on the automatic comparison, the one or
16 more classes of the first schema with which the at least a portion of the target data should be
17 associated.

1 35. (Previously presented) A computer-implemented system for associating target
2 data with a product classification schema, the system comprising a data association module
3 operable to:

4 access a first product classification schema, the first schema comprising a taxonomy
5 comprising a hierarchy of classes into which products may be categorized, the first schema
6 further comprising ontologies associated with one or more of the classes, each ontology
7 comprising one or more product attributes;

8 access target data to be associated with the first schema, the target data organized
9 according to a second product classification schema;

10 determine one or more classes of the first schema with which at least a portion of the
11 target data should be associated based on a an automatic comparison, without translating the
12 target data from the second schema to the first schema, between the target data and the
13 product attributes of the ontologies of the first schema or between the target data and values
14 for one or more of the product attributes of the ontologies of the first schema, the values
15 being stored in one or more seller databases and identified by one or more pointers associated
16 with one or more classes of the first schema; and

17 associate the at least a portion of the target data with one or more classes of the first
18 schema in response to determining, based on the automatic comparison, the one or more
19 classes of the first schema with which the at least a portion of the target data should be
20 associated, the target data being associated with the classes of the first schema using one or
21 more pointers to the target data.

1 36. (Currently amended) A computer-implemented method for associating target
2 data with a product classification schema, the method performed using a computer system
3 comprising one or more processing units and one or more memory units, the method
4 comprising:

5 using the computer system, accessing a first product classification schema, the first
6 schema comprising a taxonomy comprising a hierarchy of classes into which products may
7 be categorized, the first schema further comprising ontologies associated with one or more of
8 the classes, each ontology comprising one or more product attributes;

9 using the computer system, accessing target data to be associated with the first
10 schema, the target data organized according to a second product classification schema;

11 using the computer system, determining one or more classes of the first schema with
12 which at least a portion of the target data should be associated based on a an automatic
13 comparison, without translating the target data from the second schema to the first schema,
14 between the target data and the product attributes of the ontologies of the first schema or
15 between the target data and values for one or more of the product attributes of the ontologies
16 of the first schema, the values being stored in one or more seller databases and identified by
17 one or more pointers associated with one or more classes of the first schema; and

18 using the computer system, associating the at least a portion of the target data with
19 one or more classes of the first schema in response to determining, based on the automatic
20 comparison, the one or more classes of the first schema with which the at least a portion of
21 the target data should be associated, the target data being associated with the classes of the
22 first schema using one or more pointers to the target data.

1 37. (Previously presented) Software for associating target data with a product
2 classification schema, the software being embodied in a computer-readable medium and
3 when executed operable to:

4 access a first product classification schema, the first schema comprising a taxonomy
5 comprising a hierarchy of classes into which products may be categorized, the first schema
6 further comprising ontologies associated with one or more of the classes, each ontology
7 comprising one or more product attributes;

8 access target data to be associated with the first schema, the target data organized
9 according to a second product classification schema;

10 determine one or more classes of the first schema with which at least a portion of the
11 target data should be associated based on a an automatic comparison, without translating the
12 target data from the second schema to the first schema, between the target data and the
13 product attributes of the ontologies of the first schema or between the target data and values
14 for one or more of the product attributes of the ontologies of the first schema, the values
15 being stored in one or more seller databases and identified by one or more pointers associated
16 with one or more classes of the first schema; and

17 associate the at least a portion of the target data with one or more classes of the first
18 schema in response to determining, based on the automatic comparison, the one or more
19 classes of the first schema with which at the least a portion of the target data should be
20 associated, the target data being associated with the classes of the first schema using one or
21 more pointers to the target data.